

the present also we have no sound data for deciding whether, how, and when the Ascones and Leucones were developed from the Pharetrones. It is, however, certain that the family Sycones branched off very early (at least in the Jurassic period).

[To be continued.]

XLI.—*Descriptions of new Coleoptera belonging to the Genera Monomma, Silis, and Lithinus.* By CHARLES O. WATERHOUSE.

Monommidæ.

Monomma quadrimaculatum, sp. n.

Elliptico-ovale, convexum, piceum, nitidum; elytris nigro-piceis, maculis rotundatis rufis notatis.

Long. $2\frac{3}{4}$ lin.

General form of *M. philippinarum*. Head very closely, finely, but distinctly punctured. Thorax densely and rather strongly punctured; the sides not reflexed, but narrowly impressed within the margin. Elytra rather strongly and closely striate-punctate; the punctures in the scutellar region much larger, the first stria very short; the interstices rather closely, very delicately, but distinctly punctured; each elytron with two rather large round spots, one near the shoulder, the other subapical.

Hab. Philippine Islands (*Cuming*).

Monomma pilosum, sp. n.

Elliptico-ovale, leviter convexum, nitidum, nigro-fuscum, fulvo-pilosum; thorace subtiliter irregulariter punctulato, angulis anticis productis obtusis, marginibus piceis; elytris sat fortiter striato-punctatis, striis apicem versus evanescentibus; prosterni projectura valle marginata, medio fortiter parce punctato; tarsis longis.

Long. $6\frac{1}{2}$ lin.

Rather an elongate species, not very convex, blackish brown, with very short fulvous pubescence above. Thorax not quite twice as broad as long, very finely and not very thickly punctured, the lateral margins flattened but not reflexed. Elytra scarcely broader than the thorax, three times as long, rather attenuated towards the apex; the lines of punctures are well marked, but disappear towards the apex;

the punctuation of the interstices is fine and sparse. The pubescence is very short and rather coarse, and would probably never be very close. The mesial projection of the prosternum has a deep impressed line all round, the enclosed part sparingly and rather strongly punctured; mesosternum rather thickly but obscurely punctured. The epipleura of the elytra is very closely, finely, and obscurely punctured. Tarsi long, especially the posterior pair.

The only described species which appears to have long tarsi like the present species is *M. grande*, Thomson, from which it differs in having the thorax more transverse, and the epipleuræ of the elytra not smooth.

Hab. Fianarantsoa, Madagascar (*Rev. W. Deans Cowan*).

Monomma abstrusum, sp. n.

Ovale, leviter convexum, nitidum, piceo-nigrum, brevissime fulvo-pubescentibus; thorace irregulariter subtiliter punctato, angulis anticis prominentibus, obtusis; elytris thorace $2\frac{3}{4}$ longioribus, sat fortiter striato-punctatis, striis apicem versus evanescentibus, circa scutellum fossato-punctatis; prosterni projectura vix marginata, lævi; tarsi sat longis.

Long. $4\frac{1}{2}$ lin., lat. $2\frac{3}{5}$ lin.

Rather a short broad species, closely allied to the preceding, but much smaller and relatively shorter and more oval. The thorax is very distinctly but not very thickly punctured, the punctuation unequally distributed. Elytra with lines of rather strong punctures, which do not extend to the apex, the interstices almost without punctuation; the rather coarse fulvous pubescence is irregularly distributed. The prosternal projection has its margins slightly raised, quite smooth and shining, as is also the mesosternum.

This species is closely allied to the preceding, and has long posterior tarsi; but it is a much shorter species; the projection of the posterior margin of the thorax over the scutellum is unusually acute. Scutellum transversely cordiform. The punctures of the elytra around the scutellum are large and horseshoe-shaped. The prosternal process and the mesosternum are smooth.

Hab. Fianarantsoa, Madagascar (*Rev. W. Deans Cowan*).

Telephoridæ.

Silis madagascariensis, sp. n.

Fulvo-ochracea, opaca, sericea; antennis pedibusque (femorum basi excepta) nigris.

Long. 6 lin.

♂ thorace angulis posticis profunde excisis, calcaratis; disco postice impresso utrinque bituberoso, medio nigro.

♀ thorace angulis posticis simplicibus, rotundatis; disco minus impresso.

Somewhat the appearance of *Telephorus lividus*, L., but larger and opaque. Head subquadrate, flat above, parallel at the sides in the male, slightly narrowed posteriorly in the female; mandibles large, curved, pitchy at the apex; antennæ three fourths the length of the elytra, slender. Thorax one fourth broader than long, obtusely rounded in front, impressed within the margins; the disk with a slight mesial carina in front, impressed in the middle behind, the sides obtusely bituberoso; the posterior angles are deeply excavated above, elevated behind, excised at the sides, and with a sharp spur directed forwards over the excavation. Elytra the same width as the thorax, parallel, opaque, silky, with very slight indication of two costæ on each.

Hab. Antananarivo (*Rev. R. Toy*) and Fianarantsoa (*Rev. W. Deans Cowan*).

Lithinidæ.

Lithinus penicillatus, sp. n.

Elongatus, cylindricus, niger, fulvo-squamosus, cristis plurimis fulvis ornatus; elytris crebre fortiter punctatis.

Long. 7-9½ lin.

Forehead with two approximate tufts of fulvous hairs. Thorax a little longer than broad, rounded in front, straight at the sides, scarcely narrowed posteriorly, strongly but not very thickly punctured, with six tufts of fulvous hair on the anterior margin, and four on the disk, the posterior pair of which are very small and sometimes partly black. Elytra very little broader than the thorax, parallel, with close lines of large deep punctures or fossæ (the intervals narrow), with very numerous tufts of fulvous hair, and six of black hair arranged as follows:—two large tufts in the middle of each elytron near the base, black, fulvous behind, with a smaller fulvous tuft at its side; there are eight arranged in a circle on the back behind the middle, the four posterior ones more or less black; below these there are four others, one on each subapical callosity and two close to the suture; there is one on the margin below the shoulder, another about the middle, and three on each side of the apical margin. Legs clothed with fulvous scales; knees black.

Hab. Antananarivo (*Rev. R. Toy*).

This species is closely allied to *L. nigrocristatus*, but is much more elongate and cylindrical. It appears from description to be nearer *L. planus*, Coquerel (Ann. Fr. 1859, p. 251); but I can see nothing that can be termed a tubercle either on the thorax or elytra; and the punctures of the elytra are certainly not "distant."

XLII.—On the Zoological Position of the Ophiurans obtained by Dr. Wallich, F.L.S., during the Voyage of H.M.S. 'Bulldog' in 1860. By Prof. P. MARTIN DUNCAN, F.R.S. &c.

WHILST on board H.M.S. 'Bulldog' in 1860, Dr. Wallich had the good fortune to be instrumental in obtaining, from the depth of 1260 fathoms, the first evidence of a satisfactory nature that higher animals than Foraminifera, Rhizopoda, and Spongida inhabit the ocean-floor at considerable depths.

He wrote in his description of the voyage* as follows:—

"What wisdom and ingenuity failed to achieve, hunger or curiosity accomplished; and thus whilst the sounding-apparatus only succeeded in bringing up, from a depth of 1260 fathoms, a number of minute shell-covered creatures so simply organized as to render them incapable of perceiving or escaping a danger, thirteen starfishes varying in diameter from two to five inches came up, convulsively embracing a portion of the sounding-line which had been paid out in excess of the already ascertained depth, and rested for a sufficient period at the bottom to permit of their attaching themselves to it. These starfishes arrived at the surface in a living condition, and, what is still more extraordinary, continued to move their long spine-covered rays for a quarter of an hour afterwards."

Dr. Wallich had these interesting specimens placed in spirit; and one was figured clinging to the sounding-line and presenting the disk to the observer. He did not describe the forms; and consequently many names have been given to them, and some criticisms have been elaborated in reference to these names. Unfortunately the value of all this is not great; for the specimens have hitherto never been examined.

Being engaged in a description of the Ophiurans collected in Smith's Sound, during the late voyage of Arctic discovery under Sir George Nares, F.R.S., I was anxious to see some

* G. C. Wallich, M.D., F.L.S., F.G.S., &c., 'The North-Atlantic Seabed, comprising a Diary of the Voyage on Board H.M.S. Bulldog in 1860' (London: Van Voorst, 1862), p. 68.